Seminario El Almendro 2018

Coordinator: Javier Rodríguez Rodríguez

Total duration: 6 hours with break (1 credit)

Session: Thursday, December 20, 2018, 10:00 h.

Venue: Audiovisual Room 3.1.S08, Rey Pastor Building (Leganés campus)

Free entrance

El Almendro is an annual seminar that features a variety of presentations by Spanish researchers developing their work abroad or at notable institutions in Spain. The presentations are addressed to a target audience from diverse areas in the field of engineering and basic science.

The seminar can be attended in person or followed by streaming service. The videos of the presentations will be uploaded to the University’s media website in January.

Our Ph.D. students can earn one credit of research skills training (“formación transversal”) with this activity. For this purpose, it is required to do a brief report on at least one of the presentations (maximum length: one page per presentation) and submit it to the seminar’s coordinator (javier.rodriguez@uc3m.es) before January 31st. The credit will be awarded to all students with a passing grade.

Former editions:

El Almendro 2017 (Part I) | El Almendro 2017 (Part II)

El Almendro 2016 (Part I) | El Almendro 2016 (Part II)

El Almendro 2015 (Part I) | El Almendro 2015 (Part II)

Inquiries: seguimientodotorado@uc3m.es
Speakers

1. **Ignacio Pagonabarraga.** Director of CECAM (Centre Européen de Calcul Atomique et Moléculaire), EPFL, Lausanne (Suiza)

*De los microorganismos a los microrobots: las propiedades emergentes en los sistemas intrínsecamente alejados de equilibrio*

Ignacio Pagonabarraga es doctor en física por la Universidad de Barcelona y catedrático de física de la materia condensada en la misma universidad. En la actualidad es director de CECAM (Centro Europeo de Cálculo Atómico y Molecular) en la EPFL, Lausanne (Suiza). Su investigación se centra en el origen del comportamiento colectivo de sistemas alejados del equilibrio. Ha desarrollado y usado métodos computacionales mesoscópicos adaptados a sistemas heterogéneos fuera de equilibrio. Autor de más de 165 publicaciones científicas en diferentes revistas internacionales, ha dirigido 9 tesis doctorales y supervisado la estancia de 11 investigadores postdoctorales.

2. **Pedro Sáenz.** Instructor in Applied Mathematics, MIT

*Walking droplets*

Pedro Sáenz has been an Instructor in Applied Mathematics at MIT since August 2015. Before he received his B.Sc. in Mechanical Engineering and M.Sc. in Civil Engineering from the University of La Rioja, Spain. He was awarded his Ph.D. in fluid mechanics from the University of Edinburgh, Scotland, and pursued brief postdoctoral research at the University of Maryland and Imperial College London from 2014 to 2015. His research blends experiments, numerical simulations and theory, and seeks motivation in a variety of areas, ranging from engineering and biology to optics and quantum mechanics.

3. **Iván Blanco Sánchez –** Finance Department, CUNEF

*Maths and Finance Jobs*

Aeronautical Engineer, Polytechnic University of Madrid, and PhD in Finance, UC3M. He has worked in different banks and private investment companies, mainly on the mathematical modeling of financial markets. Currently, he is a professor at CUNEF, Spain.

4. **Elena Remacha Motta.** Pre-doctoral researcher, University of Strasbourg

*Microscopy for capturing fast biological processes in 3D*

Elena Remacha did her bachelor in Biomedical Engineer and a masters in Industrial Mathematics, both at Universidad Carlos III de Madrid. At the moment she is doing an Industrial Doctorate with the University of Strasbourg and in collaboration with the microscopy company Leica Microsystems. Her project combines fluorescence microscopy techniques with the study of the development of the heart in the embryo, using zebrafish as an animal model.

5. **Ignacio Andreu-Angulo.** Pre-doctoral researcher, University of Cambridge

*Influence of Aspect Ratio on Dynamic Stall of a Finite Wing*

In 2016, Ignacio Andreu-Angulo graduated with a B.S. in Aerospace Engineering from the University of Maryland. During his B.S., he conducted research on reverse flow as well as on the effect of an impulsive change in camber. He then pursued a M.S. also in Aerospace Engineering at the University of Illinois, Urbana-Champaign, where he studied the influence of aspect ratio on Dynamic Stall. This year, he has started his Ph.D. at the University of Cambridge to continue working on unsteady aerodynamics.